



May 12, 2017

By Electronic Filing

Marlene H. Dortch, Secretary
Federal Communications Commission
445 Twelfth Street, SW
Washington, DC 20554

Re: *Update to Parts 2 and 25 Concerning Non-Geostationary, Fixed-Satellite Service Systems and Related Matters*, IB Docket No. 16-408

Dear Ms. Dortch:

EchoStar Satellite Operating Corporation (“ESOC”) and Hughes Network Systems, LLC (“Hughes,” and together with ESOC and their affiliates, “EchoStar”) files this *ex parte* letter to supplement its comments and reply comments filed in response to the above-captioned proceeding.¹ Specifically, EchoStar responds here to certain Reply Comments filed on April 10, 2017 that address: 1) potential revisions to the milestone rules; 2) whether the Federal Communications Commission (“Commission”) should align its domestic rules with current International Telecommunication Union (“ITU”) regulations; and 3) the Commission’s proposal to permit non-geostationary satellite orbit (“NGSO”) operations on an unprotected, non-interference basis with respect to geostationary orbit (“GSO”) operations in the 29.3-29.5 GHz band.

The Commission should adopt specific milestones for NGSO constellation authorizations

EchoStar requests that the Commission set a specific milestone for the launch and operation of NGSO constellations. Some parties, specifically SpaceX and Boeing, recommend a flexible milestone regime that would provide excessive leeway to NGSO constellation operators seeking to deploy and alter the size of large constellations, to the detriment of other satellite operators. SpaceX requests that the Commission cap the constellation size of the NGSO licensee at the six-year milestone date, rather than revoke the authorization. It asserts that an NGSO network should only be required to deploy a sufficient number of satellites to provide commercial operations and after that point, the Commission should permit the NGSO

¹ See *Update to Parts 2 and 25 Concerning Non-Geostationary, Fixed-Satellite Service Systems and Related Matters*, Notice of Proposed Rulemaking, 31 FCC Rcd 13651 (2016) (“NGSO NPRM”).

authorization holder “to continue to evolve as necessary to meet capacity requirements, support additional services, and otherwise respond to market demands.”² Boeing argues that the Commission should allow NGSO operators to designate their own thresholds for the number of satellites that should be launched by the sixth year milestone and subsequent thresholds for any later milestones.³

EchoStar does not object to the Commission revising the milestone requirement for NGSO constellations so that a portion of the constellation is launched within six years and the remainder within nine years.⁴ However, the flexibility requested by SpaceX and Boeing would create regulatory uncertainty for the rest of the satellite industry. In particular, other satellite operators would be unable to plan with any certainty for the number of NGSO satellites that would be operating and must be accounted for in terms of coordination. It would also give NGSO authorization holders the chance to engage in spectrum speculation.

The Commission should align its rules with the ITU’s rules

Several parties propose that the Commission should use this proceeding to align its technical and operational rules with the current ITU regulations.⁵ As EchoStar has argued previously, harmonizing FCC and ITU rules would benefit the satellite industry as a whole.⁶ It would lessen the regulatory burden and promote regulatory certainty for satellite operators who deploy satellites around the world. To the extent that the Commission does not harmonize its rules with ITU rules, the Commission should explicitly state that (i) its rules are limited to U.S. operations; and (ii) U.S.-licensed NGSO systems must operate consistent with international regulations when providing service outside the United States. The Commission should implement Telesat’s suggestion that absent a compelling reason to do otherwise, the Commission will align its rules with the ITU Radio Regulations.⁷

NGSO operations in the 29.3-29.5 GHz band should only be permitted on an unprotected, non-interference basis

Consistent with its proposal in the *NGSO NPRM*, the Commission should permit NGSO Fixed-Satellite Service (“FSS”) operations in the 29.3-29.5 GHz band, but only on an unprotected, non-interference basis with respect to GSO FSS operations.⁸ Boeing argues that the Commission should authorize NGSO operations in the 19.3-19.4 GHz, 19.6-19.7 GHz, and 29.3-

² Reply Comments of Space Exploration Technologies Corp., IB Docket No. 16-408, at 3-4 (filed Apr. 10, 2017). Unless otherwise noted, references in this letter to parties’ “Reply” refer to reply comments in this proceeding filed on or about April 10, 2017.

³ Boeing Reply at 22-25.

⁴ *NGSO NPRM*, 31 FCC Rcd at 13663-64 ¶ 32.

⁵ Inmarsat Reply at 2-3; Telesat Canada Reply at 1-2; LeoSat Reply at 8 (requesting that the FCC align its EPFD limits with the ITU limits).

⁶ EchoStar/Hughes Reply at 6-8.

⁷ Telesat Canada Reply at 2.

⁸ *NGSO NPRM*, 31 FCC Rcd at 13657 ¶ 13.

29.5 GHz frequency bands, and not require NGSO to protect GSO operations in these bands.⁹ Both Inmarsat and EchoStar oppose Boeing's proposal for co-primary NGSO use of the 29.3-29.5 GHz band.

The ITU limits FSS use of the 29.1-29.5 GHz (Earth-to-space) band to geostationary satellite systems and feeder links to NGSO systems in the mobile-satellite service.¹⁰ The 29.25-29.5 GHz band is currently allocated to GSO FSS operators on a primary basis. Allowing NGSO operations in the 29.3-29.5 GHz band on an unprotected, non-interference basis would accomplish several important goals. It would keep the Commission's rules in line with ITU regulations; avoid disrupting the global regulatory landscape while providing more flexibility for NGSO operations. It would also provide regulatory certainty for GSO satellites already operating in that band. Finally, NGSO FSS operations could be permitted to operate in this band pursuant to the ITU's first-come, first-serve process and not disrupt existing GSO operations. If the Commission decides to allow NGSO use of the band, such use should be on an unprotected, non-interference basis vis-à-vis GSO and should be limited to operations in the United States.

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This letter is filed pursuant to Section 1.1206 of the Commission's rules. Please direct any questions regarding this matter to the undersigned.

Respectfully Submitted,

/s/ Jennifer A. Manner

Jennifer A. Manner

Senior Vice President, Regulatory Affairs

⁹ Comments of The Boeing Company, IB Docket No. 16-408, at 6-7 (filed Feb. 27, 2017); Boeing Reply at 9.

¹⁰ 47 C.F.R. § 2.106, n.5.535A.